

# Throat Packs in Paediatric Maxillo-Facial Surgery A Prospective Pilot Study

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## Introduction

- Throat packs are commonly used to prevent post-operative nausea and vomiting (PONV) and respiratory complications from the ingestion/aspiration of blood during airway surgery
- A recent systematic review found no evidence of benefits from the use of throat packs in adults, but found many reports of complications. Routine insertion by anaesthetists is not recommended<sup>1</sup>
- Unrecognised retention can cause acute airway obstruction resulting in serious harm and death. This constitutes a 'Never Event' as defined by NHS England. There have been 17 throat pack retention never events reported since 2015<sup>2</sup>
- A retrospective study comparing children having cleft palate surgery with and without a throat pack found no difference in early post-operative complications between the two groups<sup>3</sup>

Anaesthesia 2018, 73, 535-548

### Editorial

Have we reached the end for throat packs inserted by anaesthetists?



Anaesthesia 2018, 73, 612-618

doi:10.1111/anae.14197

### Review Article

Systematic review of benefits or harms of routine anaesthetist-inserted throat packs in adults: practice recommendations for inserting and counting throat packs

An evidence-based consensus statement by the Difficult Airway Society (DAS), the British Association of Oral and Maxillofacial Surgery (BAOMS) and the British Association of Otorhinolaryngology, Head and Neck Surgery (ENT-UK)

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### The use of throat packs in pediatric cleft lip/palate surgery: a retrospective study

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Received: 3 May 2017 / Accepted: 8 February 2018 / Published online: 22 February 2018  
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## Method

- A prospective observational pilot study comparing the incidence of PONV and respiratory complications in children undergoing maxillo-facial surgery (alveolar bone graft surgery) with and without a throat pack
- Data from children having alveolar bone graft surgery was collected prospectively from May 2019 using the electronic patient record system
- Data collected on PONV, pain scores, post-operative analgesia, and adverse airway events / respiratory complications

## Results

- 42 cases (19 without a throat pack vs 23 with a throat pack)
- Majority ASA 1 – 2
- Median age 9 years old; 64% male (n= 27)
- 100% of cases had a cuffed ETT and were extubated awake
- 100% of cases received dual anti – emetic prophylaxis in theatre
- All received morphine 0.1 mg Kg<sup>-1</sup> and paracetamol 15 mg Kg<sup>-1</sup> in theatre. 64% (n=27) received NSAIDs
- No retained throat packs
- No increased PONV in the cohort without a throat pack
- No increased adverse airway events or respiratory complications in the cohort without a throat pack

Outcome (first 24 hours)	Throat Pack (n=23)	No Throat Pack (n=19)	p value
Adverse airway event / respiratory complication	0	0	=
Retained throat pack	0	0	=
Nausea and vomiting	6/23 (26%)	6/19 (32%)	0.74
Opiate analgesia (morphine 0.1 – 0.2 mg Kg <sup>-1</sup> )	4/23 (17%)	9/19 (47%)	0.04
Median pain score (0 -10)	0 (0-9)	0 (0-7)	-

## Conclusion

- Our prospective pilot study didn't demonstrate an increase in the incidence of PONV or respiratory complications in children having maxillo-facial surgery without a throat pack
- This could be due the low number of patients and the low incidence of some of the outcomes measured
- However in view of the lack of evidence for its benefits and the risk of serious harm from its accidental retention, we believe routine insertion of throat packs for airway surgery should be questioned

### References

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3. Smarius BJA, Guillaume CHAL, Jonker G, van der Molen ABM, Breugem CC. The use of throat packs in pediatric cleft lip/palate surgery: a retrospective study. *Clin Oral Investig*. 2018; 22 (9): 3053 – 3059.